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**FINANCING OF ROAD PROJECTS IN WARMIA  
AND MAZURY VOIVODSHIP IN THE ASPECT  
OF ACCESSION OF POLAND TO THE EUROPEAN  
UNION**

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Key words: road projects, European Union funds, financing of projects.

**A b s t r a k t**

The paper aims at determining the influence of the accession of Poland to the European Union on financing and scope of road projects in Warmia and Mazury voivodship. The material for the study was obtained from the Voivodship Roads Management (VRM) in Olsztyn, which is responsible for administration, maintenance and development of the roads network in Warmia and Mazury voivodship. The paper presents the current sources for road projects financing in Poland. On the basis of the study it was established that the accession of Poland to the European Union had a positive influence on road infrastructure development in Warmia and Mazury voivodship mainly through increasing the number of sources of financing. After gaining the status of a European Union member by Poland the share of funds allocated for current maintenance of roads in the structure of expenditures of the Voivodship Roads Management in Olsztyn decreased while the share of funds for new road projects increased.

**FINANSOWANIE INWESTYCJI DROGOWYCH W WOJEWÓDZTWIE WARMIŃSKO-  
-MAZURSKIM W ASPEKTCIE WSTĄPIENIA POLSKI DO UNII EUROPEJSKIEJ**

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Słowa kluczowe: inwestycje drogowe, fundusze Unii Europejskiej, finansowanie inwestycji.

**A b s t r a k t**

Artykuł ma na celu określenie wpływu, jaki wywarło wstąpienie Polski do UE na finansowanie i zakres inwestycji drogowych w województwie warmińsko-mazurskim. Materiał badawczy pozyskano

z Zarządu Dróg Wojewódzkich w Olsztynie, który zajmuje się administrowaniem, utrzymaniem i rozwojem sieci drogowej w województwie warmińsko-mazurskim. Przedstawiono aktualne źródła finansowania inwestycji drogowych w Polsce. Na podstawie przeprowadzonych badań stwierdzono, że wstąpienie Polski do UE pozytywnie wpłynęło na rozwój infrastruktury drogowej w województwie warmińsko-mazurskim, przede wszystkim dzięki zwiększeniu liczby źródeł jej finansowania. Po uzyskaniu przez Polskę statusu członka UE w strukturze wydatków Zarządu Dróg Wojewódzkich w Olsztynie zmniejszył się udział środków przeznaczonych na bieżące utrzymanie dróg, wyraźnie wzrósł natomiast udział środków przeznaczonych na nowe inwestycje drogowe.

## Introduction

Poor level of development and technical condition of transport infrastructure in Poland are among the fundamental barriers to economic growth and modernization of the country hindering the processes of economic transformation and full integration of Poland with the European Union in the field of transport policy, mainly access to the network and market (*Infrastruktura*. 2004). Accession of Poland together with other countries of Central and Eastern Europe to the European Union creates the need for adjusting the internal transport infrastructure to the standards of European networks, which allow free movement of people and goods that is of fundamental importance for establishing the expanded free market.

Transport infrastructure development in Poland, including the network of public roads and motorways was characterized by many inappropriate developments occurring since 1950s. They resulted mainly from excessively low outlays on investment projects, changing programs and lack of consistency in implementation of projects as well as scattering of outlays. The outlays for investment projects not only did not allow the development of transport infrastructure ahead of the current needs but also made preventing decapitalization of the assets impossible (WOJEWÓDZKA-KRÓL 2003).

The network of national roads in Poland has many defects that cause that their standard is much lower than in the European Union countries. The share of collision-free roads (motorways and express roads) in the entire network of public roads in Poland is relatively low (ca. 3,6%). The majority of main roads are generally accessible, which results in collisions between individual types of traffic (freight, passenger) and also between the function of servicing the traffic and the function of servicing the road environment. According to experts, geometric parameters of Polish roads are not matching the requirements of current traffic; first of all their strength in frequent cases does not satisfy the general European Union standard requirement of 115 kN/axis. Also the technical status of the surface on Polish roads and bridges is far from the desired quality. Increased traffic congestion is observed on the roads, which

leads to, among others, an increase in the number of traffic accidents and other external transport costs (KOWALEWSKI 2005). Absence of roads representing appropriate standards is the major barrier to development of the country that limits the potential for using the potential of Polish economy such as geographic position and market size. Additionally, the status of roads in Poland hinders international exchange with the EU and other neighboring countries and limits the possibilities for attracting foreign capital and mobility of workforce. Those factors decrease competitiveness of Polish economy and, as a consequence, form a barrier to development and innovation processes in the country (ROLLA 2004).

### **Goal, scope and methodology of studies**

The goal of the study is to determine the effects of the accession of Poland to the European Union on the example of road projects in Warmia and Mazury voivodship.

Achievement of that goal requires answering the following research questions:

1) What funds are allocated for road network maintenance and development in Warmia and Mazury voivodship after Poland's accession to the European Union as compared to the preaccession period?

2) For what purpose are the road funds used in Warmia and Mazury voivodship?

3) What is the level of absorption of road funds allocated for road projects in Warmia and Mazury voivodship?

The research material was gathered using the documentation method. Thanks to its application the secondary data was obtained from the Voivodship Roads Management in Olsztyn, which deals with administration and maintenance of road network in Warmia and Mazury voivodship. The methods of analyses and comparisons were used for processing the data collected. The conducted analysis of the data allowed computing the appropriate measures of economic parameters, e.g. the measures of structure and measures of relations between components. The paper also applies the vertical and horizontal comparisons with the plans.

### **Financing of road projects**

Both maintenance and development of the road network in Poland are currently financed from the following sources:

- State Treasury (ST),
- local government,
- National Road Fund (NRF),
- credit and loans contracted by the State Treasury, local government and Bank Gospodarstwa Krajowego (BGK) for the NRF,
- European Union funds,
- business entities when traffic load caused by their activities exceeds 20% of the total traffic load on the road,
- revenues from sales of bonds issued by local government as well as Bank Gospodarstwa Krajowego (for the NRF) (TALUNAS 2006).

In 2003, the last year before accession of Poland to the European Union, the excise tax on fuels collected by the State (1772 M PLN) was the main source of roads financing at the Generalna Dyrekcja Dróg Krajowych i Autostrad (General Directorate for National Roads and Motorways) (GDDKiA) while the smallest amount was planned to be obtained from the State budget – 94 M PLN (SUWARA 2003).

The domestic public contribution included funds from:

- the State budget,
- the units of local government,
- other domestic public funds, i.e. dedicated funds, budgets of State-owned legal entities, contributions of beneficiaries from outside the public finance sector applying for co-financing of projects aimed at public benefits.

Currently, the National Road Fund is another important source of roads funding in Poland. It was established at the Bank Gospodarstwa Krajowego on the basis of the Act of 27.10.1994 on toll motorways and the National Road Fund (DzU 2004 nr 256, poz. 2571 ze zm.). The NRF started operating as of 1.01.2004. It supports implementation of the Government Program of Construction of Roads and Motorways in Poland through accumulating funds for preparation, construction, reconstruction, rehabilitation and maintenance as well as protection of motorways, express roads and other national roads.

The basic sources supplying funds to the NRF are:

- current revenues from the fuel charge on engine fuels and gas for vehicles (80% of the revenues supply the NRF and 20% the Railway Fund),
- funds transferred by the GDDKiA as fees paid by operators of toll motorways and fees for tender documents,
- interest on NRF funds on account with the BGK and bank deposits,
- other revenues from road fees (fees and penalties collected on the basis of the Act on road transport and the Act on public roads).

The additional sources of funds include:

- liabilities contracted by the BGK to supply the NRF in the form of credit and loans as well as issuance of bonds,

- revenues for motorways in case where the collection of fees is done by the GDDKiA,
- funds from foreign sources that are not reimbursable, grants, donations and other revenues.

The NRF as an important source of roads funding should, first of all, finance projects implemented using the European Union aid funds. The financial support from the EU for implementation of programs as well as infrastructural projects increases the demand for domestic funds, which is mainly the consequence of the necessity to co-finance specific projects as well as the requirement to pre-finance the amounts allocated from the European Union funds<sup>1</sup>.

Amendment of the regulations concerning the toll motorways and the National Road Fund (starting with the last quarter of 2005) charged the NRF with the duty to disburse, in the form of monthly compensations to all operators of toll motorways, the compensation for resignation from collecting tolls for heavy goods vehicles. Those disbursements are to be financed from revenues from sales of the passage payment cards (vignettes) that are collected by the GDDKiA on the basis of the regulations on road transport<sup>2</sup>.

The budget subsidy, until 2004 the most important source of funding for road projects, also has an important share in funding of road projects. The budget subsidy comes from the allocation from the excise tax included in fuel price (*Drogi i mosty...* 2004).

The state budget reserves can be used for subsidizing projects on county and voivodship roads as well as projects on county, voivodship and national roads within the limits of towns that possess the status of a county<sup>3</sup>. Additionally, road projects are also financed from dedicated reserve of the State. Absorption of funds from the EU budget requires possessing significant funds by the public finance sector units. Funds allocated for the purpose in specific budget segments by individual disposers of those segments, i.e. line ministries should be the main source of co-financing of tasks involving EU funding. As a consequence the EU funds should be treated as a supplement to domestic outlays made by individual beneficiaries.

State budget funds cannot be the only source for co-financing of programs and projects implemented with participation of the EU funds. As a consequence it is necessary to use the funds of State dedicated funds such as the Labor Fund, Environment Protection Fund and other<sup>4</sup>.

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<sup>1</sup> [www.transport.projekt.pl](http://www.transport.projekt.pl) (21.11.2006).

<sup>2</sup> [www.bgk.pl/fundusze/kfd.jsp](http://www.bgk.pl/fundusze/kfd.jsp) (28.02.2007).

<sup>3</sup> [www.kongresdrogowy.pl](http://www.kongresdrogowy.pl) (28.02.2007).

<sup>4</sup> [www.infor.pl](http://www.infor.pl) (27.02.2007).

It should be highlighted that the possibility of obtaining funds from the EU Funds for financing, e.g. infrastructural projects in the transport sector forces the local government authorities and competent Government agencies (mainly the GDDKiA) to change the approach to road projects planning and implementation. The positive aspect of Polish preparations to absorption of aid funds from the referenced funds was that excessive centralization of funds distribution was avoided (BURNEWICZ 2004).

### **Financing of voivodship roads network maintenance and development in Warmia and Mazury voivodship during the years 2003-2005 – plans and performance**

The Voivodship Roads Management in Olsztyn administers the network of voivodship roads with the total length of 1870,25 km and encompasses with its activities the area of Warmia and Mazury voivodship excluding the towns possessing the status of counties (Olsztyn and Elbląg). According to the agreement between the Mayor of Kętrzyn County and the Voivodship Management Board, the VRM also manages over 438 km of county roads. It also performs the function of the body managing the traffic on voivodship roads. Table 1 presents the limits of funds available to the VRM in Olsztyn for road and bridge projects during the period covered by the study.

In 2003, the planned limit of funds was 7 458 013 PLN, in 2004 that limit was significantly higher as compared to the preceding year amounting 29 740 311 PLN, while in 2005 it amounted 33 365 716,00 PLN. Out of the above amounts the actually spent amounts were: 7 293 148,48 PLN, 29 646 319,52 PLN and 31 344 652,50 PLN respectively.

In 2003, the budget plan for the VRM was very modest as compared to the following years. The largest outlays were planned for current maintenance of roads and bridges. The relatively small number of planned investment projects on roads and bridges resulted from limited funds (lack of sufficient number of projects financing sources and their limited accessibility).

A major increase of total planned funds occurred in 2004; the number of new sources of funding for road projects and non-reimbursable subsidies increased as a consequence of Poland's accession to the European Union, which gave the VRM in Olsztyn wider potential for implementing new road projects. More funds were allocated for new projects and less for current maintenance of road infrastructure.

Very high operational expenditures of the VRM in 2004 and 2005 are cause of concerns. Those expenditures are linked to investments in volume structures, investment purchases, current operation of the organization as well as

Table 1  
Performance of the VRM in Olsztyn during the years 2003-2005

Item	Budget of outlays for years (in PLN)			Budget outlays performance (in PLN)		
	2003	2004	2005	2003	2004	2005
Outlays for roads and bridges	18 704 335,00	43 027 053,00	55 968 025,00	18 539 470,36	42 933 061,82	53 946 961,23
a) investment projects on roads and bridges	7 458 013,00	29 740 311,00	33 365 716,00	7 293 148,48	29 646 319,52	31 344 652,50
– projects implemented within the budget year	1 241 126,00	26 597 173,00	6 834 395,00	1 076 726,54	26 503 188,76	6 834 391,17
– long-term investment projects	6 216 887,00	3 143 138,00	26 531 321,00	6 216 421,94	3 143 130,76	24 510 261,33
b) current maintenance of roads and bridges	11 246 322,00	13 286 742,00	22 602 309,00	11 246 321,88	13 286 742,30	22 602 308,73
Operational costs of the entity	7 034 986,00	49 981 466,00	63 219 700,00	7 034 917,69	49 886 602,47	61 193 447,73
County roads in Kętrzyn County	3 041 172,00	3 044 759,00	2 060 236,00	2 526 968,83	3 033 638,94	2 059 523,38
Total	28 780 493,00	53 026 225,00	65 279 936,00	28 101 356,88	52 920 241,00	63 256 961,11

Source: Own work based on the data of the VRM in Olsztyn.

employees payroll and the payroll derivatives. It is surprising that they are higher than investment outlays on roads and bridges.

The current maintenance of roads encompasses winter maintenance, road surface renovation, rehabilitation of sidewalks and breaks, partial rehabilitation and other current maintenance works. In 2003, the amount of 11 246 322 PLN, of which 11 246 321,88 PLN representing 100,00% of the allocated amount was spent, was allocated for current maintenance of roads and bridges. In 2004, the amount of 13 286 742 PLN, of which 13 286 742,30 PLN representing 100,00% of planned expenditures was spent, was planned for that purpose. The significant increase of funds planned for maintenance of roads and bridges occurred in 2005. The increase in the number of sources of funds for financing road projects and non-reimbursable subsidies for development of road infrastructure allowed embarking on projects that could not be implemented before accession of Poland to the European Union.

The structure of performance of the VRM expenditures plan for the years 2003-2005 is presented in Table 2.

In 2005, the amount of 22 602 309 PLN, of which 22 602 308,73 PLN representing 100,00% of the plan was spent, was allocated on current maintenance of roads and bridges.

The data presented in Table 2 indicates that in none of the years covered the plan of expenditures was performed 100%. The differences between the amounts planned and actual expenditures resulted, among others, from lower projects implementation costs, differences between the offered price and implementation costs, the necessity of making less horizontal signage than initially planned (during modernization of junctions). Nevertheless, the performance of the plan should be treated as satisfactory as in the majority of cases it exceeded 95%.

Table 2  
Structure of the VRM in Olsztyn outlays plan performance during the years 2003-2005

Item	Plan performance (in %) during the year		
	2003	2004	2005
Outlays for roads and bridges	99,12	99,78	96,39
a) investment projects on roads and bridges	97,79	99,68	93,94
– projects implemented within the budget year	86,75	99,65	100,00
– long-term investment projects	99,99	100,00	92,38
b) current maintenance of roads and bridges	100,00	100,00	100,00
Operational costs of the entity	100,00	99,81	96,79
County roads in Kętrzyn County	83,10	99,63	99,96
Total	97,64	99,80	96,90

Source: Own work based on the data from the VRM in Olsztyn.



Road projects are capex intensive. Own funds of units managing the roads and bridges are insufficient compared to the need. Poland as the European Union Member State gained not only the additional possibilities of using numerous earlier unavailable sources of funding for road projects but it also received an opportunity to match the countries that are leaders in road infrastructure development.

In 2003, the VRM in Olsztyn allocated the relatively highest proportion of funds to current maintenance of roads and bridges because of the limited financial capacity (no State budget subsidy). In 2005, it allocated the relatively highest amount of funds for long-term projects. The highest amount of funds for projects involving roads and bridges (26 597 173 PLN) was allocated in 2004 (Tab. 3).

As concerns investment projects on roads and bridges implemented by the VRM in Olsztyn during individual budget years, it can be found that in 2003 those projects were financed entirely from the VRM funds. During the years 2004 and 2005 the VRM also received subsidies from the State budget (Tab. 3).

Long-term projects require higher financial outlays than one-year projects as the projects that require many years are more complex. Additionally, the extended implementation period results in the increase of expenditures for, e.g. payroll of employees performing specific project tasks.

Table 3  
Road and bridge projects (one year) of the VRM in Olsztyn – total projects implemented during budget years 2003-2005

Year	Planned VRM projects (in PLN)			Performance as at the last day of the year (in PLN)		
	total outlays	including		total outlays	including	
		VRM funds	state budget subsidy		VRM funds	state budget subsidy
2003	1 241 126	1 241 126	0	1 076 726,54	1 076 726,54	0
2004	26 597 173	7 185 015	19 412 158	26 503 188,76	7 091 101,76	19 412 087
2005	6 834 395	2 800 064	4 034 331	6 834 391,17	2 800 060,17	4 034 331

Source: Own work based on the data from the VRM in Olsztyn.

Within the frameworks of the voivodship contract for Warmia and Mazury voivodship for the years 2001-2003, the VRM in Olsztyn planned allocating the amount of 6 216 887 PLN for investment projects. The contribution of own funds of the VRM was 1 392 191 PLN (22,39%), while the remaining part, i.e. 4 824 696 PLN (77,61%) were the State budget funds. In 2003 the VRM

received no State budget subsidy for one-year projects (Tab. 3). The VRM performed 99,99% of the investment expenditures plan using the budget subsidy to the same extent.

Performance of the investment projects plan by the VRM in Olsztyn as at the end of 2003 was 6 216 421,94 PLN (99,99%). Performance of the plan of expenditures funded from own funds amounted 1 392 190,17 PLN and the State budget funds – 4 824 231,77 PLN.

The long-term road and bridge investment projects implemented by the VRM in Olsztyn on the basis of the long-term investment program were financed in 2004 from own funds of the VRM, the structural (EU) funds as well as territorial government and other funds. Within the frameworks of long-term investment plan the VRM in Olsztyn planned for 2004 the road and bridge investment projects amounting 3 143 138 PLN, of which around 100,00% i.e. 3 143 130,76 PLN was spent. The total outlays within the frameworks of that program amount to 325 674 076 PLN. The part of that amount not used in 2004 was used in the consecutive years depending on the timeframe of the individual projects. As Poland acceded the European Union in 2004 all the subsidies from the structural funds were visibly reflected in the following years mainly.

In 2005, the road and bridge investment projects of the VRM in Olsztyn included in the long-term investment program were financed mainly from own funds of the VRM and the subsidy from the European Regional Development Fund (ERDF) as well as the State budget (fig. 1). The performance of the plan for long-term investment plan reached 24 510 261,33 PLN, representing 92,38% of the outlays planned. The own funds had the highest share in that amount at 11 989 639,14 PLN, while the share of the ERDF was the smallest at 3 457 894,19 PLN.

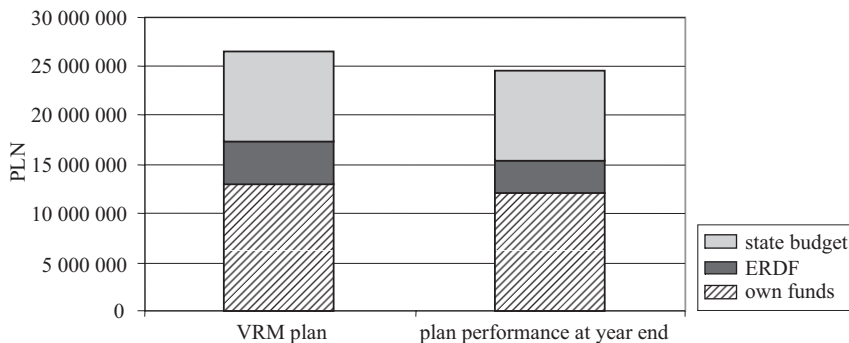


Fig. 1. Road and bridge investment projects of the VRM in Olsztyn in 2005 resulting from the long-term investment program

Source: Own work based on the data from the VRM in Olsztyn.

The total financial outlays on investment projects on roads and bridges in 2005 amounted 352 312 078 PLN. During that year 6,96% of the total outlays according to the long-term investment program were made. Some of the expenditures on investment projects on roads and bridges were qualified as funds rolled-over for 2006.

Warmia and Mazury voivodship as indicated by the data obtained from the VRM in Olsztyn uses the opportunity of developing road projects offered by the accession of Poland to the European structures. The positive influence of accession to the EU on the number and scope of road investment projects in Warmia and Mazury is visible while the increased potential of funding those projects creates the opportunity for fast improvement of road infrastructure in the region.

## **Conclusion**

The conducted studies on road investment projects financing allowed achievement of the goal of the study, i.e. determination of the effects of the accession of Poland to the European Union based on the example of road projects in Warmia and Mazury voivodship implemented by the Voivodship Roads Management in Olsztyn. The following conclusions were formulated on the basis of the results obtained:

1. Accession of Poland to the European Union caused an evident increase in both the value and number of funds that can be used for financing road investment projects at both the national level and the level of individual voivodships. The European Union funds offer a particularly valuable source for road projects financing because that are non-reimbursable as opposed to the funds of international financial institutions. As a consequence they also have a positive influence of transport infrastructure development.

2. Following obtaining by Poland of the status of the European Union Member State clearly visible changes took place in both the value (evident increase) and the structure of expenditures of the Voivodship Roads Management in Olsztyn. First of all, the share of funds allocated for current roads maintenance decreased while the share of funds allocated for new road investment projects increased.

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